

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/500,749	11/17/2004	Claude Durand	1811-52	7187	
24106 EGBERT LAW	7590 02/22/2007 / OFFICES	EXAMINER			
412 MAIN STREET, 7TH FLOOR			PRAKASAM, RAMYA G		
HOUSTON, TX	X 77002		ART UNIT	PAPER NUMBER	
			3651		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MO	NTHS	02/22/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary			Application No. App		Applicant(s)	pplicant(s)		
		·	10/500,749		DURAND ET AL.			
		Examiner		Art Unit				
	*		Ramya G. F		3651			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status	·	,						
1)⊠ F	esponsive to communication(s) file	ed on 17 No	ovember 200	04.				
,—	This action is FINAL. 2b)⊠ This action is non-final.							
3)□ S	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
С	losed in accordance with the pract	ice under <i>Ex</i>	x parte Qua	yle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims								
4)⊠ C	4)⊠ Claim(s) <u>1-24</u> is/are pending in the application.							
48	4a) Of the above claim(s) is/are withdrawn from consideration.							
5) 🗌 C	5) Claim(s) is/are allowed.							
6)⊠ C	6)⊠ Claim(s) <u>1-24</u> is/are rejected.							
•	claim(s) is/are objected to.							
8) 🗌 C	claim(s) are subject to restrict	ction and/or	election red	quirement.				
Applicatio	n Papers							
9)□ TI	ne specification is objected to by th	ne Examiner	r.					
10)⊠ TI	10)⊠ The drawing(s) filed on <u>30 June 2004</u> is/are: a) accepted or b)⊠ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s	· •							
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)								
	of Draftsperson's Patent Drawing Review (i	Paper No(s)/Mail D Notice of Informal F				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/08/04. 5) Notice of Informal Patent Application 6) Other:								

Art Unit: 3651

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 22(a) – See page 11 of Specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Art Unit: 3651

5. There are several antecedent basis problems with regards to several limitations in the claims. For example: Claim 7 recites the limitation "the file number" where no file or file number has been previously defined. Claim 7 further recites the limitation "the display and data capture screen" where no capture screen was previously defined. Claim 2 recites the limitation "the stocked articles rest" where no stocked articles rest was previously defined. Claim 2 further recites the limitation "the upper side of endless idle-mounted conveyor belts" where no upper side of endless idle-mounted conveyor belts was previously defined. There is insufficient antecedent basis for these limitations in the claims. Further, Claim 12 depends from Claim 10, however Claim 10 does not contain a collecting mat.

Page 3

- 6. These are merely examples of the antecedent basis problems. All claims must be revised in order to conform to 35 U.S.C. 112, second paragraph.
- 7. Regarding claim 17, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. As best understood by the examiner, Claims 1-7, 10-16, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bernard (U.S. Patent No. 5,472,309).

Art Unit: 3651

Bernard discloses a process for selective storing and distributing of various objects or articles, according to which the objects are stocked in bays of trays of an assembly of racks in front of which moves, on two perpendicular axes (See Figure 3), a system for proper extraction controlled by a command and control system (44), in a manner so as to position itself in front of the bay of a tray holding the stock of articles corresponding to the selected object (See Figure 3), in order to remove at least one of these articles, said process comprising the steps of:

- Of one or more endless idle-mounted conveyor belts, one or more of the conveyor belts comprising a receiving surface for each of the different bays of the stocking rack (See Column 7, lines 34-43); and
- Driving, in selective motorization of the conveyor belts, the displacement of the articles that they support in the direction of a removal point, by application of motorized rollers (218) mounted on a mobile extractor (44-See Figure 4) moving in front of the stocking rack, and driving by friction the conveyor belts of the bay supporting the selected or ordered articles, in a manner so as to enable the transfer of the first of these articles onto a receiving surface of the extractor (See Figures 3 and 4).
- Wherein the objects removed in sequence from one or more bays by the extractor during an order for several articles are transferred by the extractor onto a collecting mat (40) moving with the extractor and able to receive and temporarily store the removed objects before they are transferred to an opening or delivery chamber (See Column 7, lines 34-43).

□ Wherein transfer of objects from their stocking bay to the delivery opening is ensured by conveyance on their support side using the conveyor belts (229).

- Regulating of the width of the bays as a function of the size and the conformation of the objects by movable partitions dividing each tray into several bays comprising a variable number of conveyor belts (See Figure 3 the width of the bays acts to contain the trays therefore the width acts as a function of the size of the trays).
- Assigning bar codes to each of the conveyor belts of the trays and to each possible positioning height of the trays on the vertical members wherein layout of the trays and the bays is registered in the command and control system of the system using a portable bar code reading terminal (See Column 5, lines 65-67 and Column 6, lines 1-14).
- □ Selecting the objects remotely over a computer network linked to the system (See Column 15, lines 16-23);
- Reserving the ordered objects remotely, for a specified time period (See Column 15,
 lines 48-64); and
- Removing and delivering the objects ordered by the system, after the user calls the file number remotely displayed using the display and data capture screen, and, if necessary, payment of the price of the objects using the automatic payment peripherals (See Column 15, lines 65-67 and Column 16, line 1).

Bernard further discloses an automated system for storing and distributing various objects and articles, comprising:

Art Unit: 3651

- An assembly of a plurality of racks (See Figure 3) comprising a plurality of superposed trays (25), each rack comprised of one or more bays for stocking articles, so that the objects of a same reference can be placed in the same reference can be placed in the same bay (See Figure 3);
- A means for receiving and transport driven by a command and control system able to move in front of said assembly of racks, on two perpendicular axes, in a manner so as to be positionable in front of the bay supporting the stock of articles that corresponds to the selected object and to transfer this article to an opening or delivery chamber (See Figure 3);
- □ An extraction system (44) enabling the transfer of the selected object onto the receiving and transport mechanism (See Figures 3 and 4);
- A user interface comprising means for display and selection of the objects, and if necessary, mechanisms for automatic payment (See Column 5, lines 13-35 and Column 15, lines 5-23);
- Wherein a receiving surface of the bays on which the stocked articles rest is comprised of the upper side of endless idle-mounted conveyor belts (See Figure 3), and wherein receiving and transport means of the extraction system is comprised of an extractor (44) comprised of motorized friction rollers (See Figure 4), means for application of the motorized friction rollers against the conveyor belt or group of conveyor belts of the bay supporting the selected or ordered articles, in a manner so as to allow the transfer of the first of these articles onto the receiving surface of the extractor (See Figure 4).

Art Unit: 3651

Page 7

- □ Wherein the receiving surface of the extractor or each extractor is comprised of the upper side of a plurality of endless conveyor belts having the width and spacing corresponding approximately to the width and spacing of the conveyor belts of the trays (See Figure 4).
- □ An assembly for extraction comprising at least one extractor (44) and a collecting mat (40) comprised of an endless conveyor belt (See Figure 4).
- Wherein the upper side of the conveyor belts of the extractor or each extractor and the upper side of the conveyor belts of the extractor or each extractor and the upper side of the collecting mat, rotate in perpendicular directions (See Column 7, lines 34-43 the collecting mat moves perpendicularly via the lifting action).
- Wherein the assemblies of racks are arranged in two parallel rows facing each other and wherein the extraction assembly can move between the two rows and are comprised of a collecting mat and two extractors (44 and 124) arranged on both sides of the collecting mat (See Figure 4).
- □ Wherein the extractor or the assembly comprised of the extractor and the collecting mat is carried on a robot with two axes moving in front of the rows of the racks (See Figure 4 and Column 6 lines 47-52 40 is operated by a motor).
- Wherein the assembly of mechanisms ensuring the transfer of the ordered objects from their stocking bay to the delivery opening is comprised of conveyor belts (229).
- □ Wherein each of the belts of the trays as well as the possible positioning heights of the trays on the vertical members are identified using bar codes placed behind the

racks on the opposite side from the removal side (See Column 5, lines 65-67 and Column 6, lines 1-14).

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernard in view of Lhoest (U.S. Patent No. 5,946,217).

Bernard discloses all claimed limitations, except for the use of a metallic framework which divide the trays into several bays. Lhoest discloses the use of a metallic framework as conventional in the art, for the purpose of dividing the structures into bays or cells, therefore creating a corridor (See Column 2, lines 23-28). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Bernard by utilizing a metallic framework for the purpose of dividing the structure into bays or cells, therefore creating a corridor.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernard in view 12. of Lichti (U.S. Patent No. 5,556,247).

Bernard discloses all claimed limitations, except for an extractor that is driven at a speed greater than that of the conveyor belts of the trays. Lichti discloses an extractor that is driven at a speed greater than that of the conveyor belts of the trays (See Column 32, lines 14-30 - extractor moves from a fixed proportional speed to the storage unit to a fixed high speed) for the purpose

Art Unit: 3651

of carrying the container to another hold section (See Column 32, lines 14-30). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Bernard by utilizing an extractor that is driven at a speed greater than that of the conveyor belts of the trays for the purpose of carrying the container to another hold section.

13. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernard in view of Stauber (U.S. Patent No. 5,664,928).

Bernard discloses all claimed limitations, except for a sensor that detects the space created behind the object and stops the advance of the other objects. Stauber discloses the use of a sensor (See Column 5, lines 51-56) for the purpose of starting and stopping the conveying process depending on where the tray is located with respect to the other trays (See Column 5, lines 51-56). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Bernard by utilizing a sensor for the purpose of starting and stopping the conveying process depending on where the tray is located with respect to the other trays.

14. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernard in view of Krieg (U.S. Patent No. 5,238,350).

Bernard discloses all claimed limitations, except for a system wherein the extractor or each extractor is comprised of means ensuring elastic support of the pressure rollers against the front ends of the belts. Krieg discloses a system wherein the extractor (2) is comprised of means ensuring elastic support (spring action) of the pressure rollers (See Column 6, lines 60-63) for the purpose of ensuring that the rollers are engaged during the transport operation (See Column 6, lines 62-63). It would have been obvious to a person of ordinary skill in the art at the time of

applicant's invention to modify Bernard by utilizing and extractor is comprised of means ensuring elastic support of the pressure rollers for the purpose of ensuring that the rollers are engaged during the transport operation.

15. Claims 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernard in view of Grace (U.S. Patent No. 5,238,349).

Bernard discloses all claimed limitations, except for system wherein the driving rotation of the rollers is obtained by a graduated wheel over a large diameter of which each belt is wound and a crown, over a small diameter of the graduated wheel. Grace discloses a system wherein the driving rotation of the rollers is obtained by the conveyor belts using a graduated wheel (127) over a large diameter of which each belt wound and by a crown (See Figure 8A) over the small diameter of the graduated wheel, for the purpose of driving the conveyed objects (See Column 6, lines 8-11). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Bernard by utilizing a system wherein the driving rotation of the rollers is obtained by the conveyor belts using a graduated wheel over a large diameter of which each belt wound and by a crown over the small diameter of the graduated wheel, for the purpose of driving the conveyed objects.

Allowable Subject Matter

- 16. Claims 19, 21-22 and 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 17. The following is a statement of reasons for the indication of allowable subject matter:

Art Unit: 3651

18. Claim 19 recites a mobile slide valve using crowns and front pulleys which are wound to the conveyor belts and a means for ensuring movement for docking and detachment of the slide valve such that it occupies a first neutral position in which the rollers are away from the belt and a second position where it is against the end of the belt. These claim limitations, in combination with the other limitations of the claims, were not found in the relevant prior art.

19. Claim 24 recites an extractor comprising a clutching system with a drum driven by an epicycloidal gear train consisting of a motor pinion, satellites, an intermediate crown, wherein the epicycloidal gear train has peripheral notches that engage the mobile sliding bolt of an electric latch. These claim limitations, in combination with the other limitations of the claims were not found in the relevant prior art.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramya G. Prakasam whose telephone number is (571) 272-6011. The examiner can normally be reached on Monday - Thursday, 8:30am-7pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3651

Page 12

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

2/19/2007 RGP

SUPERVISOR YEAR INTEXAMINER